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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,249	01/15/2004	Luc R.G. Vauterin	DECL62.001A	5711
20995 7590 05/03/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER AGRAWAL, RITESH	
			ART UNIT	PAPER NUMBER
			1631	
			NOTIFICATION DATE	DELIVERY MODE
			05/03/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/758,249	Applicant(s) VAUTERIN ET AL.	
	Examiner Ritesh Agrawal	Art Unit 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-14 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' amendment and request for reconsideration in the communication filed on 2/7/07 are acknowledged and the amendments entered.

Claims 1, and 4-14 are currently pending and claims 1, 4-8, and 12-14 are under consideration.

Withdrawn Rejections

2. The rejection of claims 1-2 under 35 U.S.C 102(b) over O'Neill is withdrawn in light of applicants' amendments filed 2/7/07.

The rejection of claims 1-8 under 35 U.S.C. 101, a non-statutory rejection, is withdrawn in light of applicants' amendments filed 2/7/07.

The rejection of claims 2-8 under 35 U.S.C. 112, 2nd paragraph, an indefiniteness rejection, is withdrawn in light of applicants' amendments filed 2/7/07.

The rejection of claims 1-8 under 35 U.S.C. 112, 1st paragraph, a written description rejection, is withdrawn in light of applicants' amendments filed 2/7/07.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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3. Claims 1, 4-8, and 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

Applicants have amended independent claim 1 to include the limitation "visualizing said consensus classification in a form that provides an understanding of the organism and its features." Applicants' suggest support for this amendment in Page I, paragraph [0003], lines 2-5; Page 9, paragraph [0058], lines 1-2 (remarks, page 6, middle table). Applicants' arguments have been fully considered, but they are not found persuasive.

Applicants' cited text reads:

A means for placing an unidentified organism into a classification group which reflects its genotype is important to obtain an understanding of the organism and its features, particularly in the treatment and study of disease and in the assessment of biodiversity (specification, paragraph 3, lines 2-5).

The invention encompasses methods which may result in a means to view said classifications such as, for example, a dendrogram, a Principal Components Analysis (specification, paragraph 58, lines 1-2).

While applicants' specification provides support for a means to view the consensus classification data and supports the idea that such data may be useful in obtaining an understanding of the organism and its features, it does not support the recited claim limitation that such visualization forms actually do provide an understanding of the organism and its features. Whereas applicants' specification refers to the *necessity* (important to obtain an understanding) of such information, applicants'

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claim is drawn to the *sufficiency* (provides an understanding) of such information.

Furthermore, given the indefiniteness of the claim limitation (as addressed below) and the fact that applicants had not disclosed what forms of visualization provide an understanding of the organism and its features, applicants' disclosure does not support the claim amendment.

4. Applicants' amendment to independent claim 1 introducing the limitations of both cancelled claims 2 and 3 into the independent claim changes the claimed invention encompassed by the dependent claims. Applicants' suggest that no new matter has been added to the dependent claims and that support for the dependent claims can be found in the prior claim set (remarks, page 6, middle table). Applicants' arguments have been fully considered, but they are not found persuasive. This is a new matter rejection.

Since none of the claims in the prior claim set were dependent from cancelled claim 3, and since all of the dependent claims now require the limitations of cancelled claim 3, the prior claim set cannot support applicants' amended claims. The amendment to claim 1 requires that all dependent claims average weighted similarity matrices wherein the matrices are weighted according to the number of experimental characters used. Claims 4 and 5 provide for weighting the similarity matrices by a user defined value or by the number of features associated with a matrix element, respectively. For the claims to be proper dependent claims, the inventions encompassed by claims 4 and 5 therefore must make use of two weighting schemes to arrive at the average whereas the specification only discloses the use of single weighting schemes where the

weighting schemes are used in the alternative only (see paragraphs 64-68 of the substitute specification). Furthermore, in order for claim 7 to be a proper dependent claim, it must encompass two separate averaging events (the averaging as in step ii of claim 1 and the averaging as in step b of claim 7). There is no disclosure for carrying out multiple averaging events in the specification as originally filed. The specification only discloses calculating single averages (see cited passages from the specification above).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 4-8, and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is newly applied, but necessitated by amendment.

Applicants' amendment to claim 1 adds the limitation "visualizing said consensus classification in a form that provides an understanding of the organism and its features" in step (iv). As there are multiple organisms previously recited in claim 1, it is unclear as to which of these organisms "the organism" refers. Furthermore, it is unclear what forms of visualization provide an understanding of the organism and its features.

Claim 7 recites the limitation "the function of step ii" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Applicants' amendment to independent claim 1 removes the antecedent basis for this claim limitation.

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Furthermore, it is unclear where in step ii of claim 1, the steps of claim 7 occur. If they occur prior to the averaging and weighting of step ii, it is unclear how there could be further averaging and weighting given that the result of claim 7 is a single, average matrix. If they occur after the averaging and weighting step of step ii, the steps of claim 7 could not be carried out because there would only be a single input matrix.

Conclusion

6. No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ritesh Agrawal whose telephone number is (571) 272-2906. The examiner can normally be reached on 8:30 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ritesh Agrawal, PhD *RA*

John S. Brusca 26 April 2007
JOHN S. BRUSCA, PH.D
PRIMARY EXAMINER